

ABSTRACT

A heat storage device comprises a heat storage tank 2 charged with a heat storage material 1 for storing the heat supplied from the outside, and a heat exchanger 3 for executing an injection and an extraction of heat between the inside of the storage tank 2 and the outside by the heat exchange between the heat storage material and a heat transfer medium. The heat exchanger 3 is disposed so as to execute a heat exchange between the central portion 2a in the heat storage tank 2 and the outside, and suppresses the natural convection of the heat storage material 1 of the outer portion 2b by, for example, dispersing a liquid-absorbent material 5 in the outer portion 2b surrounding the central portion in the heat storage tank 2, whereby reduces the influence of external environment on the central portion 2a in the heat storage tank, thereby suppressing the heat loss toward the outside.